U. S. DEPARTMENT OF COMMERCE

DANIEL C. ROPER, Secretary

NATIONAL BUREAU OF STANDARDS LYMAN J. BRIGGS, Director

WOVEN ELASTIC FABRICS FOR USE IN OVERALLS

(OVERALL ELASTIC WEBBING)

COMMERCIAL STANDARD CS58-36

Effective Date for New Production May 15, 1936



A RECORDED STANDARD OF THE INDUSTRY

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1936

PROMULGATION

of

COMMERCIAL STANDARD CS58-36

for

WOVEN ELASTIC FABRICS FOR USE IN OVERALLS (OVERALL ELASTIC WEBBING)

On November 19, 1935, at the instance of the National Recovery Administration Code Authority for the Narrow Fabrics Industry, the proposed Commercial Standard for Woven Elastic Fabrics for Use in Overalls (Overall Elastic Webbing), as adopted by the Webbing Manufacturers Institute, was submitted to manufacturers, distributors, and users of this commodity for written acceptance. The industry has since accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the standard as shown herein.

The standard is effective for new production from May 15, 1936.

Promulgation recommended.

I. J. Fairchild, Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Daniel C. Roper, Secretary of Commerce.

WOVEN ELASTIC FABRICS FOR USE IN OVERALLS (OVERALL ELASTIC WEBBING)

COMMERCIAL STANDARD CS58-36

I. PURPOSE

1. The purposes of this standard are to establish definite requirements and methods of test for woven elastic fabrics for use in overalls for the guidance of producers, distributors, and users, and to provide a uniform basis for guaranteeing quality as indicated herein. (This fabric will hereinafter be referred to in this standard as overall elastic webbing.)

2. Definition.—For the purpose of this standard, overall elastic

webbing is defined to be:

A woven elastic fabric of either close-weave cord-edge (plain-weave) or twill-weave construction for use in overalls and suitable for printing thereon the trade mark or trade name of the overall manufacturer.

II. SCOPE

3. This standard covers requirements for the material, construction, and methods of testing overall elastic webbing in the following classes and widths:

Class	Widths
Close-weave cord-edge, covered rubber Twill-weave, bare rubber	% to 2 inches. % to 2 inches.

III. GENERAL REQUIREMENTS

4. Classification.—Overall elastic webbing covered by this standard is classified as "close-weave cord-edge (plain weave), covered rubber", and "twill-weave, bare rubber." Orders for webbing conforming to this standard should state specifically the type of webbing desired.

5. Designation.—Overall elastic webbing is sold by the yard, the width being specified. The yardage delivered shall be "net yards,

finished, and calendered."

6. Rubber strands.—The rubber strands shall be made of a compound containing not less than 90 percent by volume of rubber. The compound shall contain no ingredients known to the trade as oil substitutes.

7. Yarn.—The yarn shall be made of American carded or combed

peeler cotton, evenly spun.

8. Workmanship.—The overall elastic webbing shall be uniform in construction and shall be so woven as to be reasonably free from slugs, broken threads, and other manufacturing imperfections. The surface shall be suitable for satisfactory printing thereon the trade mark or trade name of the overall manufacturer.

9. Stretch.—Overall elastic webbing shall show no evidence of

failure when tested according to paragraph 15.

10. Set.—Overall elastic webbing shall not show a set greater than 0.3 inch (3 percent of its original length) when tested according to paragraph 16.

IV. DETAILED REQUIREMENTS

11. Overall elastic webbing shall be constructed to comply with the requirements of table 1, close-weave cord-edge, covered rubber webbing or table 2, twill-weave, bare rubber webbing for the class and width specified.

TABLE 1 .- Close-weave cord edge, covered rubber webbing

	Rubber strands 2		Binder yarns ³		Edge yarns		Center yarns		Filling yarns			
Width !	Total number of strands	Size * Total number of ends Size * and ply Total number of ends 7 Size * and ply		Total number of ends		Total number of ends	Size 6 and ply	Number per inch 4	Size e and ply	Weight per 100 yards 4		
Inches 5/8 3/4 7/8 1 11/4 11/4	888999	30 30 30 30 30	52 52 52 60 60	24/2 24/2 24/2 24/2 24/2 20/2	20 20 20 20 20 20 20	40/2 40/2 40/2 40/2 40/2 40/2	7 7 7 8 8 8	10/2 10/2 10/2 10/2 10/2 10/2	68 68 68 68 68	10/2 12/2 10/2 12/2 10/2 10/2	Pounds 2, 90 3, 10 3, 48 3, 74 4, 30 4, 85	
18/8 11/2 15/8 18/4 17/8 2	10 12 12 12 12 14 14	30 30 30 30 30 30	68 84 84 84 100 100	20/2 20/2 20/2 20/2 20/2 20/2	20 20 20 20 20 20 20	40/2 40/2 40/2 40/2 40/2 40/2	9 11 11 11 13 13	10/2 10/2 10/2 10/2 10/2 10/2	68 68 68 68 68	10/2 10/2 10/2 10/2 10/2 10/2	5. 15 5. 60 5. 93 6. 58 7. 25 7. 45	

Tolerance ±3 percent.
 The rubber strands shall be covered with a single wrapping of 3 ends of 20's single cotton yarns.
 The binder, edge, and center yarns shall be either bleached or dyed.
 Tolerance ±5 percent.

Number of strands per inch when laid side by side in contact and in the unstretched condition.

<sup>Size tolerance ±3 percent.
Tolerance +4 ends.</sup>

TABLE 2.—Twill-weave, bare rubber webbing

· · · · · ·			Face Edge yarns :		Binder yarns ?		Back yarns ³		Gut yarns :		Filling yarns		yards 6		
Width 1	Total number of strands	Size 4	Total number of ends	Size snd ply	Total number of ends	Size sand ply	Total number of ends	Size sand ply	Total number of ends	Size snd ply	Total number of ends	Size sand ply	Number per	Size sand ply	Weight per 100 yards
In. ¾	13	38	56	24/2	24	40/2	15	24/2	32	20/2	$\left\{\begin{array}{c} 2 \\ 12 \end{array}\right.$	30/2 16/2	} 80	20/2	1b. 3.60
7∕8	17	38	60	24/2	24	40/2	16	24/2	34	20/2	{ 2 13	30/2 16/2	80	20/2	4.02
1	18	38	64	24/2	24	40/2	17	24/2	36	20/2	3 14	30/2 16/2	80	20/2	4.68
11/8	20	38	72	24/2	24	40/2	19	24/2	40	20/2	{ 2 16	30/2 16/2	80	20/2	5. 34
13%	10	30	68	20/2	24	40/2	18	24/2	38	16/2	9	16/2	80	12/2	5.88
1½ 15/8 13/4 2	12 13 14 16	30 32 32 32 32	84 92 100 116	20/2 20/2 20/2 20/2 20/2	24 24 24 24 24	40/2 40/2 40/2 40/2	22 24 26 30	24/2 24/2 24/2 24/2	42 50 54 62	16/2 16/2 16/2 16/2	11 16 11 15	16/2 16/2 16/2 16/2	80 80 80 80	12/2 12/2 12/2 12/2	6, 66 7, 38 7, 68 9, 06

1 Tolerance ±3 percent,

The face, edge, and binder yarns shall be either bleached or dyed.
The back, gut, and filling yarns shall not be dyed.
Number of strands per inch when laid side by side in contact and in the unstretched condition.

Size tolerance ±3 percent.
 Tolerance ±5 percent.

V. METHODS OF SAMPLING AND TESTING

12. Sampling.—Normally, tests will be conducted and reports issued as representative only of the sample submitted, without reference to the method of sampling or size of lot represented. When samples are to represent given lots, the method of sampling and sizes of the lots represented shall be as agreed upon between the client and the testing laboratory.

13. Size of sample.—Each sample selected for test purposes shall be not less than 2 yards long. When the weight of the webbing is to be determined by other than the webbing or overall manufacturer, then at least a 50-yard piece shall be taken for weight determination, in addition to the test sample.

14. Standard conditions.—All tests, except the chemical determination for the amount of rubber in the rubber strands, shall be conducted on samples which have been conditioned in a standard atmosphere of 65 ± 2 percent relative humidity and 70 to 80° F for at least 4 hours.

15. Stretch.—The test specimen shall be at least 14 inches long and the full width of the webbing. Gage marks, 10 inches apart, shall be placed on the test specimen. A suitable procedure is to apply the gage marks with ink using a stamp consisting of parallel steel blades which produce very fine lines, care being taken in all cases not to injure the webbing. The test specimen is stretched until the distance between the gage marks is 15 inches and held in this position for 10 minutes.

16. Set.—After being stretched for 10 minutes, the specimen is released immediately (without being allowed to snap back), and laid out on the test table. After a rest of 10 minutes the distance between the gage marks is measured to the nearest 0.01 inch.

17. Thread count.

17a. Warp yarns.—The actual number of each of the different types of warp yarns in the webbing is counted. The different types

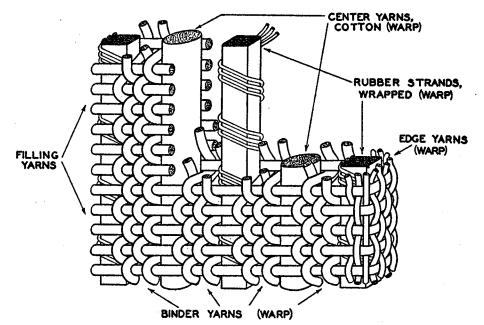


FIGURE 1.—Close-weave cord-edge, covered rubber webbing.

of warp yarns mentioned in tables 1 and 2 are shown diagrammatically in figures 1 and 2.

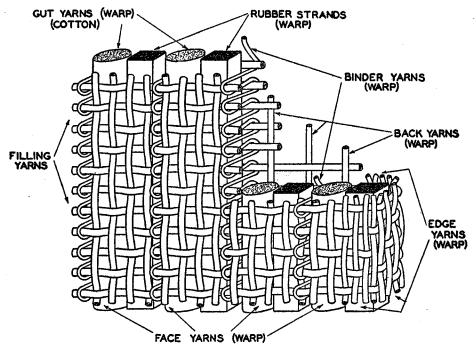


FIGURE 2.—Twill-weave bare rubber webbing.

17b. Filling yarns.—The number of filling yarns per inch are counted at five different places in the webbing and the results averaged.

18. Weight.—A measured portion, not less than 50 yards, of the

webbing is weighed and the weight per 100 yards calculated.

19. Rubber strands.—The thickness of at least five rubber strands of a test specimen shall be measured, the results averaged, and the number of strands per inch, if laid side by side in contact in the unstretched condition, calculated to obtain the size of the rubber strands. Care should be exercised that a rubber strand is not distorted in any way whatsoever in measuring.

20. Rubber content (chemical analysis).—The quantitative determination for the percentage of rubber by volume shall be conducted in accordance with the American Society for Testing Materials' Standard Methods of Chemical Analysis of Rubber Product (ASTM

designation D297-32.)

VI. GUARANTY

The following illustrates the guaranty statement to be used by the manufacturers, which is to be applied by rubber stamp to all invoices covering shipments of overall elastic webbing:

The _____ Company, manufacturer, guartees the overall elastic webbing covered by this invoice to comply with all the requirements for the class and width specified of Woven Elastic Fabrics for Use in Overalls, Commercial Standard CS58-36, issued by the United States Department of Commerce.

EFFECTIVE DATE

The standard is effective for new production from May 15, 1936.

STANDING COMMITTEE

The following comprises the membership of the standing committee, which is to review, prior to circulation for acceptance, proposed revisions to keep the standard abreast of progress. Each association nominated its own representatives. Comment concerning the standard and suggestions for revision, may be addressed to any member of the committee or to the Division of Trade Standards, National Bureau of Standards, which acts as secretary for the committee.

L. W. Joyce, (chairman), Southern Webbing Mills, Greensboro, N. C. H. C. Martin, Martin Bros., Middleboro, Ky.
Edwin Martin, Everlastik, Inc., 181 Spencer Avenue, Chelsea, Mass.
Benjamin F. Berman, The Crown Overall Mfg. Company, Third, Plum, and McFarland Streets, Cincinnati, Ohio.
T. L. Blanke, Merchandising Division, National Retail Dry Goods Association, 101 W. 31st Street, New York, N. Y.
M. F. McClane, Washington Cooperative Egg and Poultry Association, 201 Elliott Ave., West, Seattle, Wash.

201 Elliott Ave., West, Seattle, Wash.
INTERNATIONAL ASSOCIATION OF GARMENT MANUFACTURERS: Invited to name three representatives.

MAIL ORDER ASSOCIATION OF AMERICA: Invited to name a representative.

HISTORY OF PROJECT

On December 21, 1934 the National Recovery Administration Code Authority of the Narrow Fabrics Industry, at the instance of the manufacturers of overall elastic webbing, requested the cooperation of the National Bureau of Standards in the establishment of a com-

mercial standard for this commodity.

A preliminary conference attended by representatives of overall elastic webbing manufacturers, of the Code Authority of the industry, and of the National Bureau of Standards drafted a proposed commercial standard, which was later approved, with some modifications and additions, by the webbing manufacturers, the Webbing Manufacturers Institute, and a representative group of overall manufacturers.

Because of the current practice in merchandising this commodity, namely, direct from webbing manufacturers to overall manufacturers, it was the consensus of those directly concerned that a general or public conference of manufacturers, distributors, and users was not necessary. The approved draft was circularized on November 13, 1935 for written acceptance, and announcement of the success of the project was issued on March 11, 1936.

ACCEPTANCE OF COMMERCIAL STANDARD

This sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

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	Date
	Division of Trade Standards, National Bureau of Standards, Washington, D. C.
	Gentlemen: Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS58-36 as our standard of practice in the
	Production ¹ Distribution ¹ Use ¹
(Cut on this time)	of woven elastic fabrics for use in overalls (overall elastic webbing). We will assist in securing its general recognition and use, and will cooperate with the standing committee to effect revisions of the standard when necessary.
	Signature
	(Kindly typewrite or print the following lines)
	Name and title
	Company
	Street address
	City and State
	1 Please designate which group you represent by drawing lines through the other two. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "In principle" should be added after the signature.
	7

TO THE ACCEPTOR

The following statements answer the usual questions arising in

connection with the acceptance and its significance:

1. Enforcement.—Commercial standards are commodity specifications voluntarily established by mutual consent of the industry. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions but, since they represent the will of the industry as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. The acceptor's responsibility.—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard, and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard, where practicable, in the production, dis-

tribution, or consumption of the article in question.

3. The Department's responsibility.—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: First, to act as an unbiased coordinator to bring all branches of the industry together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. Announcement and promulgation.—When the standard has been endorsed by companies representing a satisfactory majority of production, the success of the project is announced. If, however, in the opinion of the standing committee of the industry or the Department of Commerce, the support of any standard is inadequate, the right is

reserved to withhold promulgation and publication.

ACCEPTORS

Individuals and organizations listed below have indicated in writing, acceptance of this specification as their standard of practice in production, distribution, or use, but such endorsement does not signify that they may not find it necessary to deviate from the standard, nor does it signify that the producers so listed guarantee all of their products to conform with the requirements of this standard.

ASSOCIATIONS

National Association Institute of Dyeing and Cleaning, Silver Spring, Md. (in principle).

(in principle).
Webbing Manufacturers Institute, New
London, Conn.

FIRMS ac American Mills Co., The, West Haven, Conn. (producer). Ansonia O & C Co., The, Ansonia, Conn. (producer). B&B Stores, Inc., Logansport, Ind. Bartel Co., Adam H., Richmond, Ind. Bender Co., The, Milwaukee, Wis. Bernstein Cohen & Co., Chicago, Ill. Better Fabrics Testing Bureau, Inc., New York, N. Y. Blue Buckle Overall Co., Inc., Lynchburg, Va. Boggs & Buhl, Inc., Pittsburgh, Pa. Boston Store, Inc., The, Colorado Springs, Colo. Broadway Department Store, Inc., Los Angeles, Calif. Buckeye Overall Co., The, Versailles, Ohio. Buttnick Manufacturing Co., Seattle, Wash. California Manufacturing Co., Oakland, Calif. Carwood Manufacturing Co., Winder, Casey Jones, Inc., Baltimore, Md. Chicago Mail Order Co., Chicago, Ill. Columbia Narrow Fabric Co., Shan-nock, R. I. (in principle).

Crowley, Milner & Co., Detroit, Mich. Crown Overall Manufacturing Co., The, Cincinnati, Ohio. Days Tailored Clothing, Inc., Tacoma, Wash. Dickson-Jenkins Manufacturing Co., Fort Worth, Tex. Donenfeld's, Inc., Dayton, Ohio (in principle)

principle).
Eloesser-Heynemann Co., San Francisco, Calif.

Everlastik, Inc., Chelsea, Mass. (producer). Fandel Co., St. Cloud, Minn. (in principle). Fine Bros. Matison Co., Laurel, Miss. Fries & Schuele Co., The, Cleveland, Ohio. Gibson Garment Co., The, Salem, Ind. Globe Store, The (The Cleland Simpson Co.), Scranton, Pa. Globe Superior Corporation, Abingdon, Hager & Bro., Inc., Lancaster, Pa. Hannah Bros., Inc., Johnson City, Harzfeld's, Inc., Kansas City, Mo. Hatch & Reutlinger, New York, N. Y. Hickory Overall Co., Hickory, N. C. High Point Overall Co., High Point, Hirsch-Weis Manufacturing Co., Portland, Oreg. Holman Manufacturing Co., Black Mountain, N. C. Hudson Co., J. L., Detroit, Mich. Industrial By Products and Research

Hudson Co., J. L., Detroit, Mich.
Industrial By Products and Research
Corporation, Philadelphia, Pa. (in
principle).
Ironall Factories Co., The, Cincinnati,
Ohio.
Johnson & Co., St. Peter, Minn.

Johnston & Larimer Dry Goods Co., The, Wichita, Kans. Keller's Department Store, Liberty,

N. Y.
Lamy Manufacturing Co., J. A.,
Sedalia, Mo.
Laucks Laboratories, Inc., Seattle,
Wash. (in principle).
Leonard & Co., W. C., Saranac Lake,
N. Y.

Levin Bros., Terre Haute, Ind. Lewin Co., Louis, Chicago, Ill. Liberty Overall Co., Birmingham, Ala. Liberty Trouser Co., Birmingham, Ala. Martin Bros., Middlesboro, Ky. (producer). Marx Co., D. L., Cairo, Ill. Mason & Hughes, Clarksville, Tenn. (in principle)

Mayer & Schmidt, Tyler, Tex. Meyers & Son Manufacturing Co., Martinsville, Ind. Northwestern Garment Factory, Chi-

cago, Ill.

Norton Bros. & Morris, Los Angeles,

Calif. (in principle).
O'Neil Co., The M., Akron, Ohio.
Oregon Millinery Co., Portland, Oreg. (in principle).

Oshkosh Overall Co., Oshkosh, Wis. Peoria Better Business Bureau, Peoria, Ill. (in principle).

Phillips-Lester Manufacturing Co., Bir-

mingham, Ala.

Providence Dyeing, Bleaching & Calendering Co., Providence, R. I. (in principle).

Regal Manufacturing Co., Inc., Knox-ville, Tenn. Rike-Kumler Co., The, Dayton, Ohio.

(in principle).

Russell Manufacturing Co., The, Middletown, Conn. (producer).

Sanger Bros., Dallas, Tex.

Schuster & Co., Inc., Ed., Milwaukee,

Schweser's Sons, George, David City, Nebr.

Scott Manufacturing Co., Cyrus W.,

Houston, Tex. Scranton Better Business Bureau, Scranton, Pa. (in principle).

Scruggs Vandervoort Barney Goods Co., St. Louis, Mo.

Siceloff Manufacturing Co., Lexington, N. C.

Southern Webbing Mills, Inc., Greensboro, N. C. (producer).

Steiner-Lobman Dry Goods Co., Montgomery, Ala.

Stillman & Van Siclen, Inc., New York, N. Y. (in principle).

Sweet Orr & Co., Inc., New York, N. Y. (in principle).

Symons Dry Goods Co., Butte, Mont. Tennessee Overall Co., Inc., Tul-lahoma, Tenn.

Tuxall Uniform Manufacturing Co., Denver, Colo. (in principle). United States Testing Co., Inc.,

Hoboken, N. J. (in principle). Van Wert Manufacturing Co., The,

Van Wert, Ohio.

Whisonant's, Gaffney, S. C. (in prin-Zion's Co-operative Mercantile Institu-

tion, Salt Lake City, Utah.

U. S. GOVERNMENT

District of Columbia, Government of the, Washington, D. C. (in principle). U. S. Treasury Department, Washington, D. C. War Department, Washington, D. C.

COMMERCIAL STANDARDS

CS no. Item CS no. Item

33-32. Knit underwear (exclusive of rayon).

34-31. Bag, case, and strap leather.

35-31. Plywood.

36-33. Fourdrinier wire cloth (second edition).

37-31. Steel bone plates and screws.

38-32. Hospital rubber sheeting.

39-32. Wool and part-wool blankets.

40-32. Surgeons' rubber gloves.

41-32. Surgeons' rubber gloves.

42-35. Fiber insulating board (second edition).

43-32. Grading of sulphonated oils.

44-32. Apple wraps.

45-33. Douglas fir plywood.

46-33. Hosiery lengths.

47-34. Marking of gold-filled and rolled-gold-plate articles other than watch cases.

48-34. Domestic burners for Pennsylvania anthractic (underfeed type). CS no. 0-30. The commercial standards service and its value to business.

1-32. Clinical thermometers (second edition).

2-30. Mopsticks.

3-28. Stoddard solvent. 4-29. Staple porcelain (all clay) plumbing fixtures.
5-29. Steel pipe nipples.
6-31. Wrought-iron pipe nipples (second edition).
7-29. Standard-weight malleable-iron or steel screwed unions.
8-23. Green block for. 8-33. Gage blanks (second edition).
9-33. Builders' template hardware (second edition).

10-29. Brass pipe nipples.

11-29. Regain of mercerized-cotton yarns.

12-35. Fuel oils (third edition).

13-30. Dress patterns.

14-31. Boys' blouses, button-on waists, shirts, and junior shirts.

15-29. Men's pajamas.

16-29. Wall paper.

17-32. Diamond-core drill fittings (second edition).

18-29. Hickory golf shafts.

19-32. Foundry patterns of wood (second edition).

20-36. Staple vitreous-china plumbing fixtures (second edition). tion). cite (underfeed type).
49-34. Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes. 50-34. Binder's board for bookbinding and other 50-34. Binder's board for bookbinding and other purposes.
51-35. Marking articles made of silver in combination with gold.
52-35. Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze, and 50-percent mohair plain frieze, and 50-percent mohair plain frieze.
53-35. Colors and finishes for cast stone.
54-35. Mattresses for hospitals.
56-36. Oak flooring. 20-36. Staple vitreous-china plumbing fixtures (second edition).

21-36. Interchangeable ground-glass joints, stop-cocks and stoppers (third edition).

22-30. Builders' hardware (nontemplate).

23-30. Feldspar.

24-30. Standard screw threads.

25-30. Special screw threads.

26-30. Aromatic red cedar closet lining.

27-30. Plate-glass mirrors.

28-32. Cotton fabric tents, tarpaulins, and covers.

29-31. Staple seats for water-closet bowls.

30-31. Colors for sanitary ware.

31-35. Wood shingles (third edition).

32-31. Cotton cloth for rubber and pyroxylin coating. 56-36. Oak flooring. 57-36. Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings.

58-36. Woven elastic fabrics for use in overalls (overall elastic webbing).

59-36. Woven dress fabrics—testing and reporting.

Notice.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice in their industry may secure copies of the above standards, while the supply lasts, by addressing the Division of Trade Standards, National Bureau of Standards, Washington, D. C.